

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES
February 19, 2003
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>

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1. Greeting and Introductions

The February 19 Technical Management Team meeting was chaired by Rudd Turner of the Corps and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Turner at 503/808-3935.

2. Water Management Plan Spring/Summer Update.

Turner distributed copies of the initial draft of the spring/summer update, noting that it is also available via a hotlink on the agenda for today's meeting on the TMT website. He went briefly through its contents, particularly the most recent (February final) forecast information on the first page of the document:

Lower Granite	14.7 MAF
The Dalles	65.3 MAF
Hungry Horse	1.53 MAF
Libby	4.7 MAF

Steve Pettit noted that, if these figures hold up and April-August runoff at The Dalles stays below 85 MAF, there would be no spill at the Lower Snake collector projects and the system would go to maximum transport. Ron Boyce said it is his hope that such a decision would be made in-season, as better forecast information becomes available later this spring. Clearly it's something we need further discussion on, Silverberg said; given the type of water year it's shaping up to be, it would probably be better to start that conversation sooner, rather than later.

The Reservoir Control Center is already being pressured by study project managers to give them some idea of the types of conditions we're likely to see this spring, Turner said. The group discussed the types of hydroanalysis model runs it would be possible for the Corps to produce between now and next TMT meeting; Paul Wagner suggested that an array of historic hydrologic runoff shapes in an 85 MAF year would be helpful. So you'd like us to look at a series of water years and hydrologic runoffs to see how likely it is that we'll be at or below 85

MAF once all is said and done? Turner asked. That would be helpful, Wagner replied. We'll try to have that ready for discussion at the March 5 TMT meeting, Turner said.

In response to a question from Boyce, Wagner said the decision about whether or not to go to maximum transport in the Snake is no longer as cut-and-dried as it was in the past; there is additional flow/survival and other data available now which will need to be factored into the equation. Again, we will discuss that further at our March 5 meeting, Silverberg said.

Turner also touched on the 2003 flow objectives (Lower Granite: 85 Kcfs spring, 50 Kcfs summer; McNary: 220 Kcfs spring, 200 Kcfs summer; Priest Rapids: 135 Kcfs spring) and the current analysis of the prospects for meeting them, as well as the current refill probabilities at Libby, Hungry Horse, Grand Coulee and Dworshak, based on the 59-year historic record. Turner noted that, if the current Libby forecast of 4.66 MAF holds up, that would be below the 4.8 MAF threshold for sturgeon "pulse" flows. Please refer to the draft spring/summer update for details of these analyses.

Another Corps participant noted that the current analysis shows Dworshak on minimum outflow through June in order to achieve June 30 refill; in other words, she said, it assumes no flow augmentation from Dworshak until July. And in terms of the Upper Snake flow augmentation contribution this year, said Tony Norris, the current very rough estimate is that Reclamation will be able to provide between 250 kaf and 300 kaf in 2003. If you look at the "teacup" diagrams showing the current status of the Upper Snake and Boise/Payette storage reservoirs, for the third year in a row the situation is not good, Norris said.

One question, said Turner – do you want the Corps to provide the "family of curves" showing current refill elevations, 30%-50%-70% June 30 refill probabilities and available spring flow augmentation volumes at each project, as we've done in the past? There was general TMT agreement that this would be helpful.

Turner asked the other TMT participants to review the spring/summer update and come to the next TMT meeting prepared to discuss it in more detail.

3. Chum Emergence Update.

Boyce said the bottom line here is that field personnel sampling 12 sites in the Lower Columbia have not yet caught very many emergent chum. He distributed a handout summarizing fall chinook and chum seining results below Bonneville Dam, through February 6; overall, he said, this (two total) is fewer chum than we would expect to have at this time, given the fact that groundwater temperatures are normal or above-normal for this time of year. He added that he talked to field personnel as recently as this morning, and they have still caught very few chum fry.

We don't know exactly what's happening out there, said Boyce, although there is some suspicion that redd superimposition due to limited spawning area availability may have played a role -- if the earlier redds were destroyed by subsequent spawners, we might expect to see later emergence this year. I do know it's not from lack of sampling effort, he said -- we're adding a 13th monitoring site this week. We will continue to monitor the situation and will provide further

updates at future TMT meetings, said Boyce. Shane Scott said WDFW field personnel sampling farther downstream are reporting chum everywhere, as of yesterday. There were 4,900 adult chum observed at Ives Island in 2002, based on carcass tagging, Scott added.

4. Q-Adjust Model Results.

Turner noted that this topic was covered during the spring/summer update discussion, Agenda Item 2, above.

5. Current System Conditions.

Boyce noted that the Bonneville tailwater elevation fell below 11.3 feet for a few hours on Sunday; given the fact that the current operation is not detrimentally impacting Grand Coulee storage, isn't there some flexibility to provide a little additional water to smooth flows out at Bonneville? he asked. John Wellschlager explained the reasons for this temporary decrease; he said his understanding is that, absent any additional rain events, it will likely be necessary to start using Grand Coulee storage, possibly impacting the Vernita Bar operation, in order to maintain the requested Bonneville tailwater elevation as soon as next week. In the meantime, though, we'll try to smooth the flows further and ensure that there are no further violations of the hard constraint of 11.1 feet, Turner said. Boyce thanked Bonneville for doing a very good job on this operation so far, noting that this is the first violation of which he is aware.

Boyce added that the spring chinook run has now begun; counts are beginning to increase in the Willamette and at Bonneville, and this is expected to be a good fishing year.

With respect to current flows and reservoir elevations in the system, Turner said Bonneville released 113 Kcfs yesterday; flows at that project have averaged between 112 Kcfs and 160 Kcfs over the past two weeks. We've been holding the Bonneville tailwater elevation near 11.5 feet, for the most part, he added. At Lower Granite, yesterday's average flow was 24.1 Kcfs; flows there have averaged between 24 Kcfs and 40 Kcfs over the past two weeks. The current elevation at Dworshak is 1548.1; that project has filled 7 feet over the past two weeks. Dworshak continues to release minimum discharge of 1.5 Kcfs; inflows have been in the 4 Kcfs-9 Kcfs range over the past week. The project's February 28 flood control elevation is 1565 feet; we will likely miss that by 10-15 feet, Turner said. The current elevation at Libby is 2406.7 and drafting slightly, with 2.4 Kcfs inflow and a minimum outflow of 4 Kcfs.

Turner said Albeni Falls is holding steady at 2055.8 feet; the project is releasing 14 Kcfs. Norris said Grand Coulee is at elevation 1288 feet, Hungry Horse, at 3511.6 and drafting slightly to meet the Columbia Falls minimum.

Wellschlager reported that the power system is in good shape, currently; as reported earlier, the 11.3-foot minimum continues to be the default tailwater operation until it becomes necessary to draft the storage projects to maintain it. There is rain on the horizon, he said, so we'll see.

Turner then touched on February final water supply forecast information: 75.6 MAF, or

70% of normal, at The Dalles, January-July. 48.1 MAF, or 76% of normal, at Grand Coulee January-July; 3.49 MAF, or 55% of normal, at Brownlee; 1.82 MAF, or 69% of normal, at Dworshak, April-July; at Libby, April-August, 4.66 MAF, or 76% of normal. He also went through precipitation data for the year to date in various basins. The February mid-month forecast will be out tomorrow, Turner added; based on recent precipitation events, we might even expect the mid-month forecast to go up a little.

6. New System Operational Requests.

No new SORs were submitted prior to today's meeting.

7. Recommended Operations.

Turner said the planned operation is to keep the headwater projects at minimum outflow, and operate the system to maintain the 11.3-foot Bonneville minimum tailwater elevation for as long as that operation does not impact Grand Coulee storage. At that point, the Bonneville minimum tailwater elevation will go to 11.0 feet, Turner said.

8. Other.

A. SBC Removal at Lower Granite. The removal of the Lower Granite surface bypass collector has been approved this year, Turner said; that means some unit outages at that project, beginning today, because of the safety needs of divers in the water. The contractor will be working at least two and possibly three shifts per day. The in-water work will end March 2, although it may extend a day or two beyond that, Wellschlager said. Turner cautioned that there may be short periods when only one unit is available at Lower Granite during the SBC removal project; if flows were to suddenly and dramatically increase, that could cause some spill at Lower Granite. However, we are pursuing a very aggressive schedule on this project, so hopefully any problems will be minimal, Turner said.

9. Next TMT Meeting Date.

The next meeting of the Technical Management Team was set for Wednesday, February 26 (10 a.m. to noon, to discuss process). The next regular TMT meeting was set for March 5. Scott noted that the TMT has discussed the possibility of a field trip to observe the juvenile chum seining below Bonneville; he said mid-March will likely be the best time for that field trip. Meeting summary prepared by Jeff Kuechle, BPA contractor.

TMT Participant List February 19, 2003

Name	Affiliation
Donna Silverberg	Facilitation Team
Ron Boyce	ODFW

Paul Wagner	NMFS
David Wills	USFWS
Shane Scott	WDFW
Steve Pettit	IDFG
Rudd Turner	COE
John Wellschlager	BPA
Ruth Burris	PPL
Scott Boyd	COE
Kyle Martin	CRITFC
Nancy Yun	COE
Mike O'Bryant	Columbia Basin Bulletin
Kevin Nordt	PGE
Tina Lundell	COE
Richelle Harding	D. Rohr & Associates
Russ George	WMCI
Jackie Abel	Facilitation Team
Robin Harkless	Facilitation Team
Margaret Filardo	FPC
David Benner	FPC
Jim Brooks	Observer
Tom Haymaker	PNGC Power
Mike Butchko	PowerX
Glen Traeger	Avista Energy

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